

NOUS45 KVEF 051936  
PNSVEF

PUBLIC INFORMATION STATEMENT  
NATIONAL WEATHER SERVICE LAS VEGAS NV  
1230 PM PST MON JAN 5 2004

#### 2003 ANNUAL WEATHER SUMMARY - LAS VEGAS, NEVADA

THE WEATHER EXPERIENCED IN LAS VEGAS, NV DURING 2003 WAS AMONG THE MOST ACTIVE AND UNUSUAL IN RECORDED HISTORY. CONDITIONS RANGING FROM EXTREME HEAT TO FLASH FLOODING TO MEASURABLE SNOWFALL WERE OBSERVED IN THE LAS VEGAS VALLEY. IT WAS THE FIRST YEAR TO REGISTER IN BOTH THE RECORD TOP 10 WETTEST AND WARMEST YEARS. STUDIES FROM THE CLIMATE PREDICTION CENTER IN CAMP SPRINGS, MD HAVE SHOWN THAT DRY WINTERS IN THE SOUTHWEST U.S. ARE TYPICALLY FOLLOWED BY WET SUMMERS, AND 2003 WAS NO EXCEPTION. THIS REPORT HIGHLIGHTS THE SIGNIFICANT WEATHER EVENTS FOR THIS RECORD SETTING YEAR.

#### JANUARY

THE WEATHER IN JANUARY IS TYPICALLY COOL AND WET WITH TEMPERATURES OCCASIONALLY DROPPING BELOW FREEZING. HOWEVER, JANUARY 2003 WAS COMPLETELY OPPOSITE WITH TEMPERATURES AVERAGING CLOSER TO MARCH READINGS. HIGH TEMPERATURES DURING THE MONTH AVERAGED BETWEEN 56 DEGREES ON THE 1ST TO 59 DEGREES ON THE 31ST. HOWEVER, THERE WERE ONLY TWO DAYS THE ENTIRE MONTH THAT THE MAXIMUM TEMPERATURE DID NOT REACH 60 DEGREES. THERE WERE SIX DAYS WITH HIGH TEMPERATURES IN THE 70S INCLUDING THE EARLIEST 70 DEGREE READING OF THE YEAR (JANUARY 5TH WAS 71). THE AVERAGE TEMPERATURE FOR THE MONTH WAS 54.1 DEGREES WHICH WAS 7.1 DEGREES ABOVE NORMAL. THESE EXCEPTIONALLY WARM TEMPERATURES MADE JANUARY 2003 THE WARMEST JANUARY ON RECORD. PRECIPITATION ONLY FELL ON ONE DAY (8TH) AND TOTALED 0.02 INCHES, WELL BELOW THE NORMAL OF 0.59 INCHES.

#### FEBRUARY

FEBRUARY BEGAN WHERE JANUARY LEFT OFF...WARM. THE HIGH TEMPERATURE ON FEBRUARY 1ST WAS 81 DEGREES. NOT ONLY WAS THIS A RECORD FOR THE DATE, BUT WAS ALSO THE EARLIEST RECORDED 80 DEGREE TEMPERATURE OF THE YEAR. BY THE 2ND, THE FIRST TASTE OF WINTER HIT LAS VEGAS AS A COLD FRONT PUSHED THROUGH THE REGION AND SENT TEMPERATURES TO BELOW NORMAL READINGS FOR THE FIRST TIME IN 2003. THE HIGH TEMPERATURES FROM THE 3RD THROUGH THE 13TH REMAINED IN THE 50S WITH LOW TEMPERATURES BETWEEN THE 6TH AND 9TH DROPPING TO FREEZING OR BELOW. TEMPERATURES IN THE LAST HALF OF FEBRUARY RETURNED TO ABOVE NORMAL AND LAS VEGAS SAW PLENTY OF MOISTURE. SEVERAL WARM AND MOIST PACIFIC STORM SYSTEMS MOVED INTO LAS VEGAS INCLUDING ONE SYSTEM THAT BROUGHT MEASURABLE RAIN FOR 6 CONSECUTIVE DAYS (FEB 24-MAR 1), TYING A LONGSTANDING RECORD SET IN 1943 AND 1949. FEBRUARY ENDED UP WITH A 2.13 INCHES OF RAIN WHICH WAS GOOD ENOUGH FOR THE 6TH WETTEST FEBRUARY ON RECORD.

## MARCH

THE OLD SAYING "MARCH COMES IN LIKE A LION AND OUT LIKE A LAMB" WAS CERTAINLY THE CASE IN 2003. SEVERAL THUNDERSTORMS DEVELOPED AROUND THE LAS VEGAS VALLEY ON MARCH 1ST AND 0.07 INCHES OF RAIN RECORDED AT THE AIRPORT. SEVERAL SPOTTERS ALSO REPORTED SMALL HAIL, WHICH IS A RARITY IN MARCH. TEMPERATURES REMAINED COOL THROUGH THE FIRST WEEK OF THE MONTH BEFORE MODERATING AND REACHING THE MID 80S BY THE 13TH. SEVERAL COLD FRONTS PUSHED THROUGH THE AREA THROUGH THE REMAINDER OF THE MONTH WITH HIGH TEMPERATURES FALLING BACK INTO THE MID 50S BY THE 16TH AND 17TH. TOTAL RAINFALL FOR THE MONTH WAS 0.32 INCHES, 0.27 INCHES BELOW NORMAL.

## APRIL

APRIL IS TYPICALLY ONE OF THE DRIEST AND WINDIEST MONTHS OF THE YEAR. HOWEVER, IN 2003 PRECIPITATION WAS RECORDED ON SEVERAL DAYS AND ENDED UP OVER DOUBLE ITS AVERAGE OF 0.15 INCHES (TOTAL FOR THE MONTH WAS 0.38 INCHES). THERE WERE 22 DAYS DURING THE MONTH OF BELOW NORMAL TEMPERATURES WITH THE HIGH ON THE 22ND OF ONLY 57 DEGREES. THIS WAS 23 DEGREES COLDER THAN THE NORMAL HIGH TEMPERATURE OF 80 DEGREES AND ALSO SET A RECORD FOR LOW MAXIMUM. ON AVERAGE APRIL WAS STILL THE WINDIEST IN 2003, BUT NO RECORDS WERE SET.

## MAY

THE FIRST 11 DAYS OF MAY WERE MUCH COLDER THAN NORMAL WITH HIGH TEMPERATURES MAINLY IN THE 60S AND 70S (AVERAGE HIGHS ARE NORMALLY BETWEEN 83 AND 86), INCLUDING A LOW MAXIMUM RECORD OF 69 DEGREES SET ON THE 9TH. BY THE 12TH STRONG HIGH PRESSURE DEVELOPED OVER THE REGION AND TEMPERATURES QUICKLY ROSE INTO THE LOWER 90S. FOR THE REMAINDER OF THE MONTH TEMPERATURES AVERAGED ABOVE NORMAL AND 7 OUT OF THE LAST 10 DAYS HAD HIGH TEMPERATURES OVER 100 DEGREES. THE HIGH TEMPERATURE ON THE 28TH WAS 109 DEGREES. NOT ONLY WAS THIS A RECORD FOR THE DATE, BUT ALSO TIED THE HIGHEST TEMPERATURE EVER RECORDED IN MAY (1951). PRECIPITATION WAS LIMITED TO JUST ONE HUNDREDTH WHICH FELL ON THE 7TH.

## JUNE

JUNE IN LAS VEGAS IS THE DRIEST MONTH OF THE YEAR WITH LESS THAN A TENTH OF AN INCH OF RAIN ON AVERAGE. THIS YEAR WAS NO EXCEPTION WITH NO RAINFALL RECORDED AT MCCARRAN. MANY WERE ALSO LED TO BELIEVE THAT THIS WOULD BE ANOTHER HOT AND DRY SUMMER WITH 17 OUT OF THE 30 DAYS RECORDING HIGH TEMPERATURES OVER 100 DEGREES. THE MONSOON, WHICH TYPICALLY BEGINS IN CENTRAL MEXICO IN MAY WAS SHOWING LITTLE MOVEMENT NORTHWARD AND MANY AREAS IN THE DESERT SOUTHWEST WERE LEFT WITH LITTLE OR NO RAINFALL.

## JULY

IN THE FIRST HALF OF JULY, TEMPERATURES IN LAS VEGAS SOARED TO WELL ABOVE 100 DEGREES AND SEVEN READINGS WERE OVER 110 DEGREES. FROM JULY 9TH THROUGH THE 16TH TEMPERATURES REACHED AT LEAST 110 WITH FOUR CONSECUTIVE DAYS OF TEMPERATURES 114 DEGREES OR HOTTER. THE

ALL-TIME RECORD OF 117 DEGREES WAS THREATENED, BUT THE HOTTEST TEMPERATURE OF THE MONTH "ONLY" ONLY REACHED 115. IN SOUTHERN ARIZONA, MONSOONAL MOISTURE WAS BEGINNING TO WORK NORTHWARD, DEVELOPING THUNDERSTORMS EACH AFTERNOON ACROSS CENTRAL ARIZONA. BY THE 16TH, ENOUGH MOISTURE MOVED INTO SOUTHERN NEVADA TO PRODUCE THE FIRST THUNDERSTORM OF THE SUMMER AND "OFFICIALLY" BEGIN THE LAS VEGAS MONSOON SEASON. FOR THE REST OF THE MONTH, THUNDERSTORMS DEVELOPED ALMOST DAILY AROUND THE REGION WITH A TOTAL OF 8 THUNDERSTORM DAYS OCCURRING IN LAS VEGAS. THE AVERAGE NUMBER OF THUNDERSTORM DAYS IN JULY IS 3. THE 8 THUNDERSTORM DAYS THIS YEAR FELL ONE SHORT OF THE MONTHLY RECORD OF 9 SET IN 1952. A TOTAL OF 1.08 INCHES OF RAIN ALSO FELL DURING THE LAST HALF OF THE MONTH MAKING THIS THE 9TH WETTEST JULY ON RECORD. ONE OF THE MOST UNUSUAL STATS OF THE MONTH WAS THE FACT THAT THIS JULY WAS THE HOTTEST ON RECORD (94.8 DEGREES) AND THE 9TH WETTEST. USUALLY ITS ONE OR THE OTHER, BUT NOT BOTH.

#### AUGUST

CLIMATE RECORDS HAVE SHOWN THAT THERE IS A LULL IN THE MONSOON PATTERN OVER SOUTHERN NEVADA DURING THE FIRST WEEK OR TWO IN AUGUST AND THE 2003 MONSOON SEASON FOLLOWED THAT TREND. ON THE 1ST THE HIGH TEMPERATURE ONLY REACHED 86 DEGREES, SETTING A RECORD FOR THE LOWEST HIGH TEMPERATURE RECORDED ON THAT DATE. TEMPERATURES DID REBOUND AND REACHED 110 BY THE 11TH. CONDITIONS REMAINED DRY UNTIL THE 15TH AND 16TH WHEN THUNDERSTORMS ONCE AGAIN DEVELOPED IN LAS VEGAS DROPPING MORE THAN A HALF AN INCH OF RAIN. EARLY ON THE 19TH, THUNDERSTORMS HAD STARTED TO DEVELOP OVER THE SPRING MOUNTAINS AND BY EARLY AFTERNOON BEGAN TO MOVE SLOWLY EAST INTO THE NORTHWEST PORTION OF THE LAS VEGAS VALLEY. AN OFFICIAL RAIN GAUGE AT LONE MOUNTAIN SHOWED A READING OF OVER 2.5 INCHES IN ONLY 25 MINUTES. THERE WERE ALSO SOME UNOFFICIAL READINGS OF OVER 5 INCHES OF RAIN IN AN HOUR. WITH THIS AMOUNT OF RAIN IN A SHORT AMOUNT OF TIME, FLASH FLOODING OCCURRED OVER A LARGE PORTION OF THE NORTHWEST VALLEY. HOWEVER, ACROSS THE REST OF THE VALLEY VERY LITTLE RAIN FELL WITH THE AIRPORT RECORDING 0.18 INCHES. THE TOTAL RAINFALL FOR AUGUST WAS 0.83 INCHES WHICH WAS ALMOST DOUBLE THE NORMAL FOR THE MONTH.

#### SEPTEMBER

THE ACTIVE MONSOON PATTERN CONTINUED RIGHT INTO SEPTEMBER WITH THUNDERSTORMS OCCURRING ON THE 2ND AND 4TH DAYS OF THE MONTH. THE STORM ON SEPTEMBER 2ND OCCURRED BETWEEN 1 AND 2 AM AND PRODUCED SOME OF THE MOST VIVID LIGHTNING IN RECENT YEARS. IT ALSO PRODUCED INTENSE RAIN (0.52 INCHES) AT THE AIRPORT AND BROKE SEVERAL RAINFALL RECORDS INCLUDING THE 5 MINUTE, 10 MINUTE, AND 15 MINUTE RAINFALL RATES. ON THE 5TH THE FIRST MAJOR PACIFIC TROUGH PUSHED THROUGH THE WESTERN U.S. BRINGING MUCH DRIER AIR AND SUPPRESSING THE MONSOONAL MOISTURE SOUTH AND "OFFICIALLY" ENDING THE 2003 MONSOON SEASON IN LAS VEGAS. TEMPERATURES AVERAGED JUST OVER 3 DEGREES ABOVE NORMAL WITH THE LAST 5 DAYS OF THE MONTH SEEING HIGH TEMPERATURES OF 100 DEGREES OR HIGHER.

## OCTOBER

OCTOBER IS TYPICALLY A TRANSITION MONTH BETWEEN SUMMER AND FALL WITH HIGH TEMPERATURES ON THE 1ST AVERAGING 88 DEGREES AND 73 DEGREES BY THE 31ST. HOWEVER, IN 2003 TEMPERATURES REMAINED ABOVE NORMAL EVERYDAY OF THE MONTH EXCEPT THE 31ST. THERE WERE 12 DAYS WITH READINGS 90 DEGREES OR HIGHER INCLUDING 94 ON THE 21ST AND 92 ON THE 22ND (BOTH RECORDS). THE AVERAGE TEMPERATURE FOR THE MONTH WAS 75.4 DEGREES WHICH WAS 6.7 DEGREES ABOVE AVERAGE. THIS PLACED OCTOBER 2003 AS THE WARMEST OCTOBER ON RECORD. NO RAINFALL WAS RECORDED DURING THE MONTH.

## NOVEMBER

NOVEMBER WAS A RELATIVELY QUIET MONTH WITH TEMPERATURES AVERAGING 2.4 DEGREES BELOW NORMAL AND PRECIPITATION AVERAGING THREE TENTHS OF AN INCH ABOVE NORMAL. ON THE 24TH, A COLD LOW PRESSURE SYSTEM SETTLED OVER THE AREA AND THE HIGH TEMPERATURE ONLY REACHED 47 DEGREES, SETTING A LOW MAXIMUM RECORD FOR THE DAY. THE NORMAL HIGH FOR THE 24TH IS 62 DEGREES. NEARLY HALF AN INCH OF RAIN FELL ON THE 12TH SETTING A DAILY PRECIPITATION RECORD. TOTAL RAINFALL FOR THE MONTH ENDED UP BEING 0.61 INCHES.

## DECEMBER

TEMPERATURES AVERAGED CLOSE TO NORMAL THROUGHOUT THE MONTH WITH MOST HIGH TEMPERATURES IN THE 50S AND 60S. THE LOW TEMPERATURE ON THE 7TH WAS 56 DEGREES WHICH CAME WITHIN ONE DEGREE OF SETTING THE ALL TIME WARMEST LOW RECORDED IN DECEMBER. THERE WERE TWO UNUSUAL WEATHER OCCURRENCES DURING THE LAST WEEK OF THE MONTH. FOR THE FIRST TIME IN LAS VEGAS RECORDED HISTORY A THUNDERSTORM OCCURRED ON CHRISTMAS DAY AND IT WAS THE FIRST TIME SINCE 1966 THAT A THUNDERSTORM WAS RECORDED IN DECEMBER. ONLY FIVE DAYS LATER LAS VEGAS AWOKE TO SNOW WITH NEARLY 4 INCHES IN SUMMERLIN TO AROUND AN INCH ON THE STRIP. THIS WAS THE FIRST ACCUMULATING SNOW TO OCCUR IN LAS VEGAS SINCE DECEMBER 6, 1998. THE TOTAL WATER EQUIVALENT OF THE SNOWFALL WAS 0.25 INCHES, WHICH BROUGHT THE MONTHLY TOTAL TO 0.96 INCHES. THIS WAS GOOD ENOUGH TO PLACE DECEMBER 2003 AS THE 9TH WETTEST ON RECORD.

## 2003 ANNUAL TOTALS

### TEMPERATURES

	OBSERVED AVERAGE	NORMAL	DEPARTURE
HIGH	80.6	79.9	0.7
LOW	59.3	56.3	3.0
MEAN	70.0	68.1	1.9

HIGHEST TEMPERATURE OF THE YEAR: 115 DEGREES ON JULY 11

LOWEST TEMPERATURE OF THE YEAR: 29 DEGREES ON DECEMBER 28

TOTAL NUMBER OF DAYS AT OR BELOW 32 DEGREES: 8 (AVERAGE: 24)  
TOTAL NUMBER OF DAYS AT OR ABOVE 100 DEGREES: 74 (AVERAGE: 72.4)  
TOTAL NUMBER OF DAYS AT OR ABOVE 110 DEGREES: 11 (AVERAGE: 8.6)

\*\*\* 2003 WAS THE WARMEST YEAR ON RECORD \*\*\*  
\*\*\* 2003 WAS THE ONLY YEAR THAT HAD AN ANNUAL AVERAGE TEMPERATURE  
OF 70 DEGREES OR ABOVE \*\*\*

TEMPERATURE RECORDS (TIED OR BROKEN):  
HIGH TEMPERATURE RECORDS: HIGH MAX: 6 HIGH MIN: 30  
LOW TEMPERATURE RECORDS: LOW MAX: 6 LOW MIN: 0

INTERESTING FACT: SINCE JANUARY 1, 2000 THERE HAVE BEEN A TOTAL OF  
125 HIGH TEMPERATURE RECORDS (HIGH MAX, HIGH MIN) AND ONLY 10 LOW  
TEMPERATURE RECORDS (LOW MIN, LOW MAX). OF THOSE 10 LOW TEMPERATURE  
RECORDS, ALL HAVE BEEN LOW MAX RECORDS. THE LAST TIME A LOW MIN  
TEMPERATURE RECORD WAS SET IN LAS VEGAS WAS JUNE 4, 1999.

#### PRECIPITATION

TOTALS	NORMAL	DEPARTURE
6.86	4.49	2.37

\*\*\*2003 WAS THE 7TH WETTEST YEAR ON RECORD\*\*\*

THIS WAS THE FIRST TIME SINCE 1998 THAT PRECIPITATION AVERAGED ABOVE  
NORMAL FOR THE YEAR.

GREATEST 24 HOUR PRECIPITATION: 0.77 ON FEBRUARY 15

SNOWFALL WAS RECORDED ON DECEMBER 30TH WITH 1 TO 4 INCHES REPORTED  
AROUND TOWN.

TOTAL NUMBER OF THUNDERSTORM DAYS: 19 (ANNUAL AVERAGE: 12)

HIGHEST OFFICIAL WIND GUST: 51 MPH ON FEBRUARY 2

\*READINGS AND RECORDS ARE FROM THE OFFICIAL WEATHER RECORDING  
STATION AT MCCARRAN INTERNATIONAL AIRPORT

\$\$

GORELOW